## REMARKS

The Final Office Action mailed May 5, 2004, has been received and reviewed. Claims 1 through 89 are currently pending in the application. Claims 20 through 24, 31 through 41, 45 through 47, 66 through 72, and 87 through 89 have been withdrawn from consideration as being drawn to non-elected invention(s). Claims 1 through 19, 25 through 30, 42 through 44, 48 through 63, 65, and 84 through 86 stand rejected. The Office Action Summary (Form PTOL-326) also indicates that claims 64 and 73 through 83 are rejected, but the body of the Office Action does not set forth a basis for such rejection. Applicant proposes to amend claims 1, 4, 7, 15, 18, 44, 48, 51, 54, 57, 62, 64 and 86. Reconsideration is respectfully requested.

**35 U.S.C. § 102(b) Anticipation Rejections**

Anticipation Rejection Based on U.S. Patent No. 5,185,040 to Sakai et al.

Claims 1 through 5, 7 through 11, 13 through 16, 43 through 44, 48 through 52, 54 through 58, 60 through 62, 85, and 86 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Sakai et al. (U.S. Patent No. 5,185,040). Applicant respectfully traverses this rejection, as hereinafter set forth.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Sakai et al. teaches a method and apparatus for forming strip-shaped electrodes 2 over the end of a plate-shaped electronic component 1. Sakai discloses an electrode paste reservoir 4 having a slotted plate 3 wherein electrode paste 2f is forced upwardly through slits 3a and introduced to **at least three surfaces** of an electronic component 1 having an end surface 1a and major surfaces 1b and 1c which are in series with end surface 1a. (Sakai, FIG. 3). Thus, Sakai discloses that "strip-shaped electrodes 2 having U-shaped sections are **simultaneously** formed on the electronic component 1 in a single electrode forming process over the end surface 1a and the major [side] surfaces 1b and 1c". (Sakai, FIG. 5' col. 5, lines 6-9) (emphasis added).

By way of contrast, claim 1 of the presently claimed invention recites a "method of applying viscous material to at least one semiconductor element, the method comprising: providing a receptacle including at least one viscous material pool containing viscous material having an exposed surface extending upwardly to a height therein, the at least one viscous material pool including at least one opening to provide access to at least the exposed surface of the viscous material; providing at least one vertically adjustable stop proximate the receptacle; controlling the height of the exposed surface of the viscous material; providing at least one semiconductor element having a first surface and at least one other surface above the first surface; and placing the at least one semiconductor element against the at least one vertically adjustable stop such that only a specific portion of the first surface the at least one semiconductor element contacts the exposed surface of the viscous material." Applicant respectfully submits that Sakai fails to disclose, either expressly or inherently, every element of the presently claimed invention.

Applicant respectfully submits that Sakai fails to disclose, either expressly or inherently, "providing at least one vertically adjustable stop proximate the receptacle." Support for this amendment can be found throughout the as-filed specification, for example, paragraph [0069]. Sakai lacks any disclosure, either express or inherent, of at least one adjustable stop proximate the receptacle. Further, Sakai fails to disclose, either expressly or inherently, "placing the at least one semiconductor element against the at least one vertically adjustable stop such that only a specific portion of the first surface the at least one semiconductor element contacts the exposed surface of the viscous material". Instead, Sakai discloses that electrode paste is **simultaneously** applied to a plurality of surfaces of a plate-shaped electronic component. (Sakai, col. 5, lines 6-9). Thus, while Sakai states that the present invention can be applicable to forming electrode on only one surface, it fails to provide an enabling disclosure of how this occurs in view of the teaching that electrode paste is simultaneously applied to a plurality of contiguous surfaces. (Cf. Sakai, col. 5, lines 6-9 and col. 6, lines 6-9).

As Sakai fails to disclose every element of the presently claimed invention, applicant submits that Sakai cannot anticipate claim 1. Therefore, claim 1 of the presently claimed invention is allowable.

Claims 2 through 5, 7 through 11, 13 through 16, and 43 and 44 are each allowable as depending, either directly or indirectly, from allowable claim 1.

Claim 44 is further allowable as Sakai fails to disclose, either expressly or inherently, adjusting the at least one adjustable stop to a desired height.

Independent claim 48 of the presently claimed invention is allowable at least for the same reasons as allowable claim 1. By way of contrast with Sakai, claim 48 of the presently claimed invention recites a "method of applying viscous material to at least one semiconductor element, the method comprising: providing a receptacle including at least one viscous material pool containing viscous material having an exposed surface extending upwardly to a height therein, the at least one viscous material pool including at least one outlet to present at least the exposed surface of the viscous material; providing at least one vertically adjustable stop proximate the receptacle; extruding the viscous material through a coating stencil to reveal the exposed surface; providing at least one semiconductor element having a bottom surface and at least one other surface above the bottom surface and positioning the at least one semiconductor element proximate the at least one vertically adjustable stop such that only a specific portion of the bottom surface of the at least one semiconductor element contacts the exposed surface of the viscous material."

Applicant respectfully submits that Sakai fails to disclose, either expressly or inherently, providing at least one adjustable stop proximate the receptacle as recited in claim 48 of the presently claimed invention. Support for this amendment can be found throughout the as-filed specification, for example, paragraph [0069]. Sakai lacks any disclosure, either express or inherent, of at least one adjustable stop proximate the receptacle. Further, Sakai fails to disclose, either expressly or inherently, "positioning the at least one semiconductor element proximate the at least one stop such that only a specific portion of the bottom surface of the at least one semiconductor element contacts the exposed surface of the viscous material". Instead, Sakai discloses that electrode paste is **simultaneously** applied to a plurality of surfaces of a plate-shaped electronic component. (Sakai, col. 5, lines 6-9). Thus, while Sakai states that the present invention can be applicable to forming electrode on only one surface, it fails to provide an enabling disclosure of how this occurs in view of the teaching that electrode paste is

simultaneously applied to a plurality of contiguous surfaces. (Cf. Sakai, col. 5, lines 6-9 and col. 6, lines 6-9).

As Sakai fails to disclose every element of the presently claimed invention, applicant submits that Sakai cannot anticipate claim 48. Therefore, claim 48 of the presently claimed invention is allowable.

Claims 49 through 52, 54 through 58, 60 through 62, 85 and 86 are each allowable as depending, either directly or indirectly, from allowable claim 48.

Claim 86 is further allowable as Sakai fails to disclose, either expressly or inherently, adjusting the at least one adjustable stop to a desired height.

**35 U.S.C. § 103(a) Obviousness Rejections**

Obviousness Rejection Based on U.S. Patent No. 5,185,040 to Sakai et al. Taken with U.S. Patent No. 5,907,246 to Abraham et al.

Claims 12 and 59 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakai et al. (U.S. Patent No. 5,185,040) taken with Abraham et al. (U.S. Patent No. 5,907,246). Applicant respectfully traverses this rejection, as hereinafter set forth.

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

The Court of Appeals for the Federal Circuit has stated that "dependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious." In re Fine, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). See also MPEP § 2143.03. Having failed to teach or suggest each and every limitation of the current application, the prior art

referenced as rendering dependent claims 12 and 59 obvious, cannot serve as a basis for rejection.

Obviousness Rejection Based on U.S. Patent No. 5,185,040 to Sakai et al. Taken with U.S. Patent No. 5,388,752 to Kawakatsu

Claims 42 and 84 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakai et al. (U.S. Patent No. 5,185,040) taken with Kawakatsu (U.S. Patent No. 5,388,752). Applicant respectfully traverses this rejection, as hereinafter set forth.

The Court of Appeals for the Federal Circuit has stated that "dependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious." In re Fine, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). See also MPEP § 2143.03. Having failed to teach or suggest each and every limitation of the current application, the prior art referenced as rendering dependent claims 42 and 84 obvious, cannot serve as a basis for rejection.

Obviousness Rejection Based on U.S. Patent No. 5,185,040 to Sakai et al. Taken with U.S. Patent No. 5,388,752 to Kawakatsu

Claims 6, 17, 53, and 63 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakai et al. (U.S. Patent No. 5,185,040) taken with Kawakatsu (U.S. Patent No. 5,388,752). Applicant respectfully traverses this rejection, as hereinafter set forth.

The Court of Appeals for the Federal Circuit has stated that "dependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious." In re Fine, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). See also MPEP § 2143.03. Having failed to teach or suggest each and every limitation of the current application, the prior art referenced as rendering dependent claims 6, 17, 53 and 63 obvious, cannot serve as a basis for rejection.

Obviousness Rejection Based on U.S. Patent No. 5,185,040 to Sakai et al. Taken with U.S. Patent No. 4,690,999 to Numata et al.

Claims 19 and 65 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakai et al. (U.S. Patent No. 5,185,040) taken with Numata et al. (U.S. Patent No. 4,690,999). Applicant respectfully traverses this rejection, as hereinafter set forth.

The Court of Appeals for the Federal Circuit has stated that "dependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious." In re Fine, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). See also MPEP § 2143.03. Having failed to teach or suggest each and every limitation of the current application, the prior art referenced as rendering dependent claims 19 and 65 obvious, cannot serve as a basis for rejection.

Obviousness Rejection Based on U.S. Patent No. 5,185,040 to Sakai et al. Taken with U.S. Patent No. 5,747,102 to Smith et al.

Claims 18 and 65 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakai et al. (U.S. Patent No. 5,185,040) taken with Smith et al. (U.S. Patent No. 5,747,102). Applicant respectfully traverses this rejection, as hereinafter set forth.

The Court of Appeals for the Federal Circuit has stated that "dependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious." In re Fine, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). See also MPEP § 2143.03. Having failed to teach or suggest each and every limitation of the current application, the prior art referenced as rendering dependent claims 18 and 65 obvious, cannot serve as a basis for rejection.

Obviousness Rejection Based on U.S. Patent No. 5,185,040 to Sakai et al. Taken with Japanese Patent No. JP 02-037964 A to Fujita and U.S. Patent No. 5,105,661 to Sekita et al.

Claims 25 through 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakai et al. (U.S. Patent No. 5,185,040) taken with Fujita (JP 02-037954 A) and Sekita et al.

(U.S. Patent No. 5,105,661). Applicant respectfully traverses this rejection, as hereinafter set forth.

The Court of Appeals for the Federal Circuit has stated that "dependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious." In re Fine, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). See also MPEP § 2143.03. Having failed to teach or suggest each and every limitation of the current application, the prior art referenced as rendering dependent claims 25 through 30 obvious, cannot serve as a basis for rejection.

Obviousness Rejection Based on U.S. Patent No. 5,185,040 to Sakai et al. Taken with U.S. Patent No. 5,388,752 to Kawakatsu

Claims 42 and 84 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakai et al. (U.S. Patent No. 5,185,040) taken with Kawakatsu (U.S. Patent No. 5,388,752). Applicant respectfully traverses this rejection, as hereinafter set forth.

The Court of Appeals for the Federal Circuit has stated that "dependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious." In re Fine, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). See also MPEP § 2143.03. Having failed to teach or suggest each and every limitation of the current application, the prior art referenced as rendering dependent claims 42 and 84 obvious, cannot serve as a basis for rejection.

## ENTRY OF AMENDMENTS

The proposed amendments to claims 1, 4, 7, 15, 18, 44, 48, 51, 54, 57, 62, 64 and 86 above should be entered by the Examiner because the amendments are supported by the as-filed specification (for example paragraph [0069]) and drawings and do not add any new matter to the application. Further, the amendments do not raise new issues or require a further search. Finally, if the Examiner determines that the amendments do not place the application in condition for allowance, entry is respectfully requested upon filing of a Notice of Appeal herein.

## CONCLUSION

Claims 1 through 19, 25 through 30, 42 through 44, 48 through 63, 65, and 84 through 86 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Office determine that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully invited to contact applicant's undersigned attorney.

Respectfully submitted,

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